



THE BONADIO GROUP
CPAs, Consultants & More

Edinboro University

OSD Scenario Analysis

February 5, 2018

FINAL

February 5, 2018

Understanding



EDINBORO UNIVERSITY Office for Students with Disabilities (OSD) offers services to over 350 OSD-enrolled students with both physical and learning challenges. Total OSD cost budget is approximately \$2M; this includes both the Auxiliary Program and the Education & General Program. **The OSD-Auxiliary Program** is an Attendant Care program providing approximately 35 moderately to severely physically handicapped students the facilities and support to live and study on campus. The Auxiliary Program incurs the majority (85%) of total OSD cost, and has run at a consistent deficit. OSD-Auxiliary costs are partially off-set by state funding revenue; the remaining revenue comes from grants, or the students themselves. A recent FY2017 accounting change burdened OSD-Auxiliary with additional overhead cost; widening this deficit, or revenue vs. cost “Gap”.

Edinboro (EU) has requested that Bonadio review and analyze the OSD program; with the goal to develop strategies and actions with potential to close this “Gap”

1. Edinboro retains control of OSD operations, and closes the “Gap” via internal revenue and cost actions
2. Evaluate USI (existing Edinboro 501-3C, previous OSD management group) ability to reassume OSD management control
3. Edinboro outsources Attendant Care to a qualified third party that can deliver these services more economically, with the same (or improved) level of performance

As of 11.20.17, with the Edinboro 503-C affiliate USI declining to participate, potential strategy evaluated for the remaining 2 Scenarios

Statement of Work (SOW) and deliverables

Decision Support Model

- **Gain best understanding of revenue and 'true cash cost' for OSD operations**
- Identify key cost inputs and drivers from Edinboro OSD operating and accounting data
- Design and build Excel Model for analysis

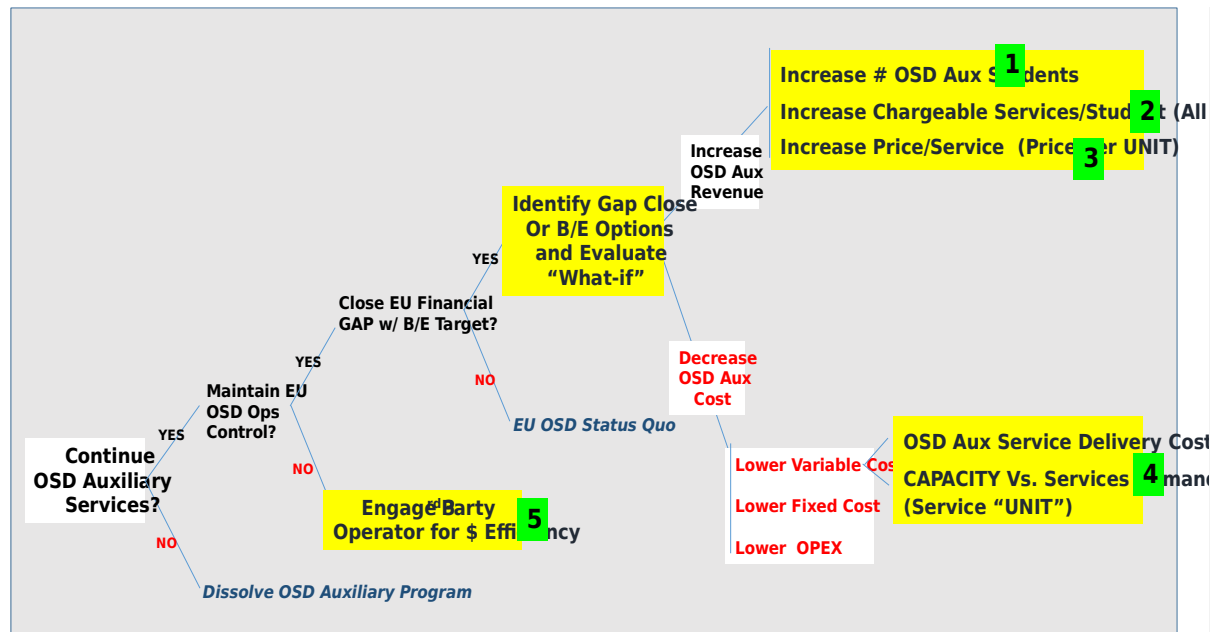
Scenario Analysis: (What-if)

- Estimate EDINBORO OSD performance baseline derived from Fall 2017 data
- Generate EDINBORO OSD **Pro Forma forecasts for FY2018-2022**
- Test Scenarios, i.e. 'Gap Closure' actions to achieve or approach Break-even (B/E)
- Perform direct comparison with 3rd Party outsource candidate
- Identify potential issues of 'Gap Closure' actions

Deliverables

- Output from OSD long-term Excel cash flow forecast model FY2018-2022)
- Financial impact of potential cost and or revenue actions
- 3rd Party Provider(s) financial comparison
- Analysis of key issues, risks and presentation of recommendations

Edinboro OSD: Decision tree analysis

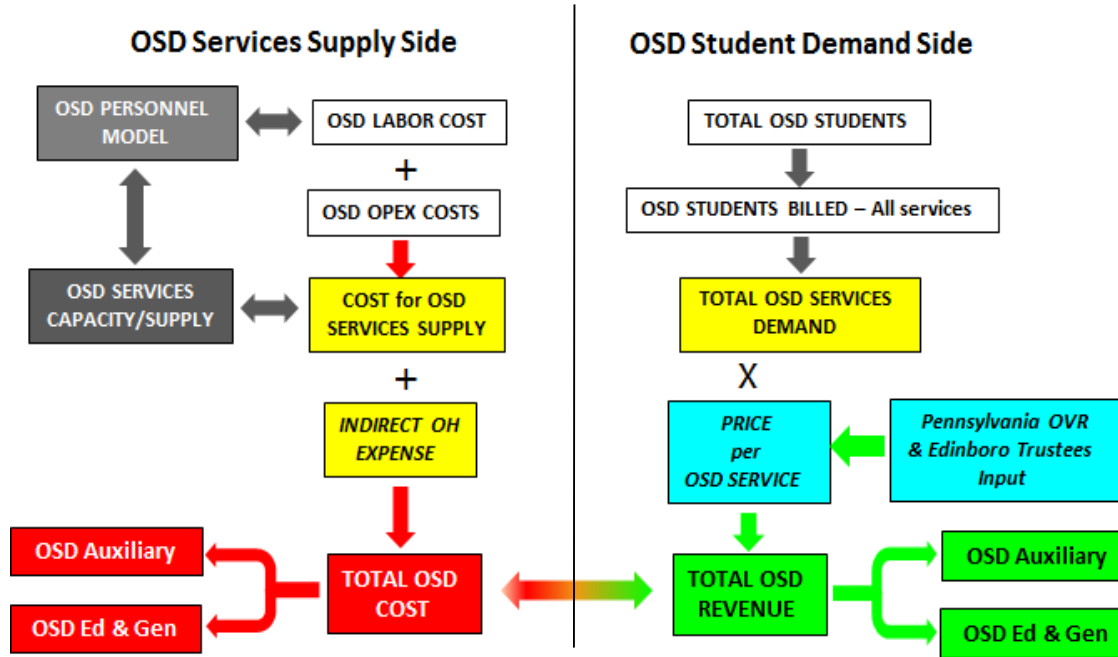
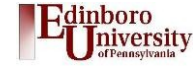


source: The Bonadio Group

SUMMARY

- Reliable information for **Items 1 through 4 (labeled in green)** is required to both evaluate B/E internally, and provide Party (Item 5) data to enable an efficient quote. Certain actions (Items 2 and 3) have been implemented
- Item 4 is especially critical; and challenging to zero in. It enables proper OSD staff sizing, either for EU OSD budgeting or Party quote
- Gap Closure or Break-Even Strategy may be a matter of degree. For example, Edinboro could decide to implement select actions, reach a certain threshold; then re-evaluate

EDINBORO OSD model design



1. **Design OSD Model**
2. Fill in BASELINE values
3. **Reconcile OSD Supply with Services Demand**
4. Forecast Student demand for OSD Services 2018-2022
5. Forecast OSD Labor and Opex costs 2018-2022
6. **Obtain Party costs for OSD Auxiliary Care “carve-out”**
7. Perform financial comparisons
8. Compare Break-Even (B/E) scenarios
9. **Develop OSD Strategy**

Key forecast model assumptions



- **OSD forecast horizon is FY2018-FY2022**
- **Static # students in OSD Auxiliary (35 +/-) with same overall Attendant Care Service demand profile over forecast horizon**
- **OSD Auxiliary Fees per Service are static through FY2020, then a 5% increase starting FY2021**
- **No growth in ancillary OSD Education and General Services over forecast horizon**
- **OSD expenses grow annually at 2% CPI rate, Bad Debt Expense is fixed at 2% of annual OSD revenue**
- **FY2018 is forecast baseline year and utilized to estimate the “Baseline Gap” for Gap Closure analysis**
- **All revenues and expenses (both direct expense and indirect OH) are viewed as ‘CASH’ for purpose of analysis**
- **Assumption of 2nd party outsourcing readiness (referred to as OSD Scenario #3) is FY2019 start**
- **3rd party contract expense based on direct quote from candidate provider (EHCA)**

OSD TOTAL: Baseline 'Gap' Analysis FY2018 (est.)



	REVENUE CATEGORY	factor	TOTAL OSD	OSD Auxiliary	OSD E&G
	Non-Sponsored: LD Service		33,140	33,140	0
	Non-Sponsored: Vans		33,563	33,563	0
AC	Non-Sponsored: Personal Care		251,427	251,427	0
	Non Sponsored: Autism		11,016	0	11,016
	NonSponsored: Meal Aide		27,229	27,229	0
	Non-Sponsored: HomeworkAide		4,684	4,684	0
\$633K	Non-sponsored: Subtotal		361,057	350,042	11,016
	Sponsored: LD Service		20,742	20,742	0
	Sponsored: Vans		92,750	92,750	0
AC	Sponsored: Personal Care		381,877	381,877	0
	Sponsored: Meal Aide		13,420	13,420	0
	Sponsored: Homework Aide		3,263	3,263	0
	Sponsored: Assistive Technology		760	760	0
	Sponsored: Autism		21,016	0	21,016
	Sponsored: Subtotal		533,826	512,811	21,016
	OSD REVENUE FALL 2017		894,884	862,852	32,031
Melt Rate	Est. Spring 2018 Melt Rate	15.0%	(134,233)	(129,428)	(4,805)
	Est. Spring 2018 OSD REVENUE		760,651	733,424	27,227
REV	TOTAL OSD REVENUE: FY18		1,655,535	1,596,277	59,258
		100.0%		96%	4%
Total Labor	total labor expense (incl allocations)**		1,726,388	1,516,971	209,417
	estimated operating expense		61,695	48,200	13,495
BD	bad debt expense (est.)	2.0%	33,111	31,926	1,185
EXP	TOTAL OSD EXPENSE: FY18		1,821,194	1,597,096	224,097
	Net OSD Oper Margin w/o EU OH		(165,659)	(819)	(164,839)
OH	Estimated University Overhead Charges		(250,000)	(250,000)	0
NET	Net OSD Oper Margin with EU OH		(415,659)	(250,819)	(164,839)

SUMMARY:

- FY18 OSD REVENUE** estimated from 11.14.17 EU Bursar records for Fall 2017; with a fall-off ("Melt Rate") anticipated for Spring 2018. **New OSD service revenue (\$48K) recorded in BLUE**
- Attendant Care REVENUE:** Fall 2017 \$amount billed for OSD attendant Care of \$633K (see Appendix i)
- EXPENSES:** Source is OSD Operations (see Appendix i)
- FALL-SPRING MELT** Applied to all revenues. Recent historical melt rates (FY billing erosion from Fall to Spring) are in 11-13% range, bumped to 15% due to presence of new services
- BAD DEBT:** Recently recorded in 1%+ range; estimate bumped to 2% with increase in revenue and new services
- Total Labor Expense :** OSD Auxiliary includes a 40% allocation from OSD E&G labor expense pool
- Overhead charges** applied 100% to OSD Auxiliary

source: EU Accounting and EU OSD Operations

OSD Scenario 1: Baseline FY2015-2022



		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
C	EDINBORO OSD TOTAL	ACTUAL	ACTUAL	ACTUAL	TBG EST.	TBG FCAST	TBG FCAST	TBG FCAST	TBG FCAST
9.00	REVENUE								
9.01	OSD Auxiliary	1,205,051	1,401,043	1,363,939	1,506,377	1,506,377	1,506,377	1,581,696	1,581,696
9.02	OSD ED & GEN	0	0	0	149,159	149,159	149,159	156,617	156,617
9.10	TOTAL OSD CASH REVENUE	1,205,051	1,401,043	1,363,939	1,655,535	1,655,535	1,655,535	1,738,312	1,738,312
9.20	EXPENSE- LABOR								
9.21	OSD Auxiliary	1,385,643	1,494,993	1,487,889	1,377,359	1,403,706	1,430,580	1,457,992	1,485,952
9.22	OSD ED & GEN	388,990	487,652	404,265	349,029	354,289	359,655	365,128	370,711
9.23	TOTAL OSD Labor Expense	1,774,633	1,982,645	1,892,154	1,726,388	1,757,995	1,790,236	1,823,120	1,856,663
9.30	EXPENSE - Opex								
9.31	OSD Auxiliary	41,321	47,584	30,783	48,200	48,200	48,200	48,200	48,200
9.32	OSD ED & GEN	55,861	33,773	19,610	13,495	13,495	13,495	13,495	13,495
9.33	TOTAL OSD CPEX	97,182	81,357	50,393	61,695	61,695	61,695	61,695	61,695
9.34	BAD DEBT (estimated)	0	0	0	33,111	33,111	33,111	34,766	34,766
9.35	OSD Management OH Allocation	0	0	0	0	0	0	0	0
9.36	Indirect OH (EU Admin OH only)	0	0	247,797	250,000	250,000	250,000	250,000	250,000
9.37	Debt service - expense	0	0	0	0	0	0	0	0
9.40	TOTAL OSD CASH EXPENSE	1,871,820	2,064,007	2,190,344	2,071,194	2,102,801	2,135,041	2,169,582	2,203,124
9.50	Net Cash From OSD TOTAL	(666,769)	(662,964)	(826,405)	(415,658)	(447,266)	(479,506)	(431,269)	(464,812)
9.6	Capital Spend (-)	0	0	(6,553)	0	0	0	0	0
9.7	Debt service - Principal pay down (-)	0	0	0	0	0	0	0	0
9.8	Change in Working Capital (+/-)	0	0	0	0	0	0	0	0
9.9	FY CASH IMPACT: OSD	(666,769)	(662,964)	(832,958)	(415,658)	(447,266)	(479,506)	(431,269)	(464,812)
10.0	BOP Cash Estimate	0	(666,769)	(1,329,733)	(2,162,691)	(2,578,349)	(3,025,615)	(3,505,121)	(3,936,390)
10.1	EOP Cash Estimate	(666,769)	(1,329,733)	(2,162,691)	(2,578,349)	(3,025,615)	(3,505,121)	(3,936,390)	(4,401,202)

SUMMARY:

- **Total OSD operations represented (Auxiliary + Ed & Gen)**
- **REVENUE:** Assumed static through FY2020 then 5% increase w/ new OVR agreement
- **EXPENSE:** 2% CPI growth annually
- **FY CASH IMPACT:** OSD burn rate relatively steady in FY2019-2022 out years at **-\$450K** +/- per FY, with inclusion of EU Admin OH charges

OSD Scenario 2: Reduce Management OH



		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
C	EDINBORO OSD TOTAL	ACTUAL	ACTUAL	ACTUAL	TBG EST.	TBG FCAST	TBG FCAST	TBG FCAST	TBG FCAST
9.00	REVENUE								
9.01	OSD Auxiliary	1,205,051	1,401,043	1,363,939	1,506,377	1,506,377	1,506,377	1,581,696	1,581,696
9.02	OSD ED & GEN	0	0	0	149,159	149,159	149,159	156,617	156,617
9.10	TOTAL OSD CASH REVENUE REV	1,205,051	1,401,043	1,363,939	1,655,536	1,655,535	1,655,535	1,738,312	1,738,312
9.20	EXPENSE- LABOR								
9.21	OSD Auxiliary	1,385,648	1,494,998	1,487,889	1,377,359	1,304,271	1,329,557	1,355,348	1,381,655
9.22	OSD ED & GEN	388,990	487,652	404,265	349,029	210,833	213,849	216,926	220,065
9.23	TOTAL OSD Labor Expense GAIN	1,774,638	1,982,650	1,892,154	1,726,388	1,515,104	1,543,406	1,572,274	1,601,720
9.30	EXPENSE - Opex								
9.31	OSD Auxiliary	41,321	47,584	30,783	48,200	48,200	48,200	48,200	48,200
9.32	OSD ED & GEN	55,861	33,773	19,610	13,495	13,495	13,495	13,495	13,495
9.33	TOTAL OSD OPEX	97,182	81,357	50,393	61,695	61,695	61,695	61,695	61,695
9.34	BAD DEBT (estimated)	0	0	0	33,111	33,111	33,111	34,766	34,766
9.35	OSD Management OH Allocation	0	0	0	0	0	0	0	0
9.36	Indirect OH (EU Admin OH only)	0	0	247,797	250,000	250,000	250,000	250,000	250,000
9.37	Debt service - expense	0	0	0	0	0	0	0	0
9.40	TOTAL OSD CASH EXP EXP	1,871,820	2,064,007	2,190,344	2,071,194	1,859,910	1,888,212	1,918,736	1,948,181
9.50	Net Cash From OSD TOTAL	(666,769)	(662,964)	(826,405)	(415,658)	(204,374)	(232,677)	(180,423)	(209,869)
9.6	Capital Spend (-)	0	0	(6,553)	0	0	0	0	0
9.7	Debt service - Principal pay down (-)	0	0	0	0	0	0	0	0
9.8	Change in Working Capital (+/-)	0	0	0	0	0	0	0	0
9.9	FY CASH IMPACT: OSD CASH	(666,769)	(662,964)	(832,958)	(415,658)	(204,374)	(232,677)	(180,423)	(209,869)
10.0	BOP Cash Estimate	0	(666,769)	(1,329,733)	(2,162,691)	(2,578,349)	(2,782,724)	(3,015,400)	(3,195,824)
10.1	EO Cash Estimate BURN	(666,769)	(1,329,733)	(2,162,691)	(2,578,349)	(2,782,724)	(3,015,400)	(3,195,824)	(3,405,693)

SUMMARY:

- Total OSD Ops
- REVENUE: Static
- LABOR EXPENSE:
 - o Reduce OSD Management expense
 - o Reduce OSD Student wages by a third
- FY CASH IMPACT: OSD burn rate effectively cut annual burn 150% in FY2019-22 out years to **-\$200-\$225K** per Fiscal year

source: EU Accounting and EU OSD Operations, TBG forecast

OSD Scenario 3: EHCA-provided Estimate

ERIE HOMES FOR CHILDREN AND ADULTS, INC.			
OSD BUDGET			
9 MONTHS (2 SEMESTERS)		1/16/2018	
1.0	PERSONNEL EXPENSES:		
1.1	Total Wages for OSD Auxiliary Management and Delivery Staff	\$	850,804.00
1.2	TRAINING	\$	9,074.40
1.3	PTO/SICK/HOLIDAY	\$	61,272.98
1.4	<u>TOTAL PAYROLL: WAGES</u>	\$	921,151.38
		Social Security & Medicare	\$ 70,468.08
		Retirement	\$ 34,543.18
		Health Insurance	\$ 138,172.71
		Other Benefits	\$ 79,219.02
1.5	<u>TOTAL PAYROLL: BENEFITS</u>	35% Taxes and Benefits	\$ 322,402.98
1.6		Staff Development	\$ 2,000.00
1.7		Other Personnel (Audit, Professional, Contract)	\$ 5,000.00
1.8	TOTAL PERSONNEL Expense (Attended Care only)	\$	1,250,554.36
2.0	OPERATING and OH EXPENSES:	Van Drivers (Full+ Part time)	\$0.00
2.1		Operating Expense	\$ 52,510.00
2.2		Administrative OH Expense	\$ 169,398.37
3.0	TOTAL EXPENSES (lines 1.8 + 2.1 + 2.2)	\$	1,472,462.72
		EHCA Operating Margin (10%)	\$ 147,246.27
4.0	EXP TOTAL PROPOSED FEE for Fiscal Year	\$	1,619,708.99
		Units (100% OVR Units Demand estimate; 10% 2nd Semester melt)	29,598
		Units (90% OVR Units Demand Estimate; 20% 2nd Semester Melt)	28,040
5.1	UNIT RATE (\$/Hour) at 95% for entire FY	\$	54.72
5.2	UNIT RATE (\$/Hour) at 90% for entire FY	\$	57.76

source: EHCA Quote

EHCA QUOTE SUMMARY:

- **PERSONNEL EXPENSE:** Based initial quote on **40 WEEK** estimate. Personnel profile is not an exact match to EU OSD Aux (e.g. EHCA includes an occupational therapist, 2 FTE on-call supervisors, et al)
- **EHCA quote does NOT include transportation (van driver salary nor special van costs)**
- **OPERATING EXPENSE:** Core OPEX is comparable to EU OSD Auxiliary, but with significant administrative expense OH add (\$169K)
- **TOTAL PROPOSED FEE:** includes 10% operating margin

OSD Scenario 3: EHCA OSD auxiliary outsource



		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
		ACTUAL	ACTUAL	ACTUAL	TBG EST.	TBG FCAST	TBG FCAST	TBG FCAST	TBG FCAST
C EDINBORO OSD TOTAL									
9.00 REVENUE									
9.01 OSD Auxiliary		1,205,051	1,401,043	1,363,939	1,506,377	1,506,377	1,506,377	1,581,696	1,581,696
9.02 OSD ED & GEN		0	0	0	149,159	149,159	149,159	156,617	156,617
9.10 TOTAL OSD CASH REVENUE	REV	1,205,051	1,401,043	1,363,939	1,655,535	1,655,535	1,655,535	1,738,312	1,738,312
9.20 EXPENSE- LABOR									
9.21 OSD Auxiliary - EHCA		1,385,648	1,494,998	1,487,889	1,377,359	1,250,554	1,250,554	1,250,554	1,250,554
9.22 OSD ED & GEN		388,990	487,652	404,265	349,029	210,833	213,849	216,926	220,065
9.23 TOTAL OSD Labor Expense	GAIN	1,774,638	1,982,650	1,892,154	1,726,388	1,461,387	1,464,404	1,467,481	1,470,619
9.30 EXPENSE - Opex									
9.31 OSD Auxiliary - EHCA	LOSS	41,321	47,584	30,783	48,200	369,155	369,155	369,155	369,155
9.32 OSD ED & GEN		55,861	33,773	19,610	13,495	13,495	13,495	13,495	13,495
9.33 EHCA - TOTAL OSD OPEX		97,182	81,357	50,393	61,695	382,650	382,650	382,650	382,650
9.34 BAD DEBT (estimated)		0	0	0	33,111	33,111	33,111	34,766	34,766
9.35 OSD Management OH Allocation		0	0	0	0	0	0	0	0
9.36 Indirect OH (EU Admin OH only)		0	0	247,797	250,000	250,000	250,000	250,000	250,000
9.37 Debt service - expense		0	0	0	0	0	0	0	0
9.40 TOTAL OSD CASH EXPENSE	EXP	1,871,820	2,064,007	2,190,344	2,071,194	2,127,148	2,130,165	2,134,897	2,138,036
9.50 Net Cash From OSD TOTAL		(666,769)	(662,964)	(826,405)	(415,658)	(471,612)	(474,629)	(396,585)	(399,723)
9.6 Capital Spend (-)		0	0	(6,553)	0	0	0	0	0
9.7 Debt service - Principal pay down (-)		0	0	0	0	0	0	0	0
9.8 Change in Working Capital (+/-)		0	0	0	0	0	0	0	0
9.9 FY CASH IMPACT: OSD	CASH	(666,769)	(662,964)	(832,958)	(415,658)	(471,612)	(474,629)	(396,585)	(399,723)
10.0 BOP Cash Estimate		0	(666,769)	(1,329,733)	(2,162,691)	(2,578,349)	(3,049,962)	(3,524,591)	(3,921,176)
10.1 EOP Cash Estimate	BURN	(666,769)	(1,329,733)	(2,162,691)	(2,578,349)	(3,049,962)	(3,524,591)	(3,921,176)	(4,320,899)

SUMMARY:

- **REVENUE:** Static
- **LABOR EXPENSE:**
 - o No Van Drivers expense included
- **OPERATING EXPENSE:**
 - o Administrative costs and profit margin included in OSD Auxiliary Expense
- **FY CASH IMPACT:** Losing ground with current EHCA quote versus Scenario 2; **-\$400K per year excluding the Van Driver salary add-back**

source: EU Accounting and EU OSD Operations, TBG forecast

OSD Scenario 3: EHCA Overview



DISCUSSION: EHCA has expressed fundamental concerns (i.e., exclusions or requirements):

No responsibility for State Regulatory interaction re: compliance issues/potential liability/risk

No responsibility for B&C of OSD fees from EU students, and/or reimbursement mechanism from State Regulatory Agency

CONTRACT DESIGN: EHCA interest in arms-length contract to provide OSD Auxiliary Services to EU for negotiated Fee per Unit

Effectively an OSD Auxiliary Services 'carve-out'

EHCA Fees would be based on a price per OSD Unit delivered

Performance levels governed by contract SLAs TBD

All other T&Cs TBD

OPERATIONAL CAPABILITY/PLANNING: EHCA does not have any contracts of proposed type/scale for EU OSD currently in place

EHCA \$20M operation that services either : (1) residents of EHCA-owned homes, or (2) remote patients

EU OSD Auxiliary would be a finite operations' of its kind/scope for EHCA

EHCA does claim capability to provide ALL services offered by OSD Auxiliary as required; including proper certification

EHCA must staff-up operations to meet EU OSD Student service delivery capacity requirements

EHCA has NOT drafted an on-site ops design, transition program, or proposed timetable **in detail**

MANAGEMENT TEAM: EHCA Management Team has exhibited competency to-date

EHCA CEO Chuck Walczak appears knowledgeable and capable. Plainly, he asks the right questions.

Walczak engages in a direct, reasonable, albeit cautious manner

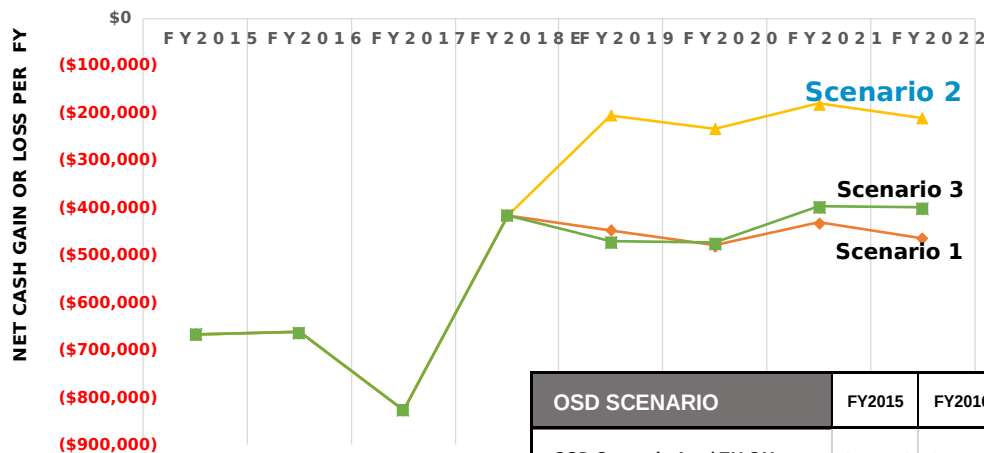
EHCA Management Team (CFO, COO others) clearly take their lead from Walczak

EHCA may need to add admin support specific to this project, as claimed

OSD Scenarios: Summary comparison



OSD SCENARIO COMPARISON



SUMMARY:

- **Scenario 2** achieves best 'Gap Closure' via Service revenue gains and proposed OSD management cost controls
- **Scenario 3 (EHCA)** is a non-starter in its current form; does NOT include Van & Driver costs
- **Scenario 1** shows expected revenue improvement in FY2018 but further cost reductions are still required

OSD SCENARIO	FY2015	FY2016	FY2017	FY2018E	FY2019	FY2020	FY2021	FY2022
OSD Scenario 1 w/ EU OH	(666,769)	(662,964)	(826,405)	(415,659)	(447,267)	(479,506)	(431,270)	(464,812)
OSD Scenario 2 w/ EU OH	(666,769)	(662,964)	(826,405)	(415,659)	(204,375)	(232,677)	(180,424)	(209,870)
OSD Scenario 3 w/ EU OH	(666,769)	(662,964)	(826,405)	(415,659)	(471,613)	(474,630)	(396,585)	(399,724)

Should OSD Auxiliary add students to close 'Gap'

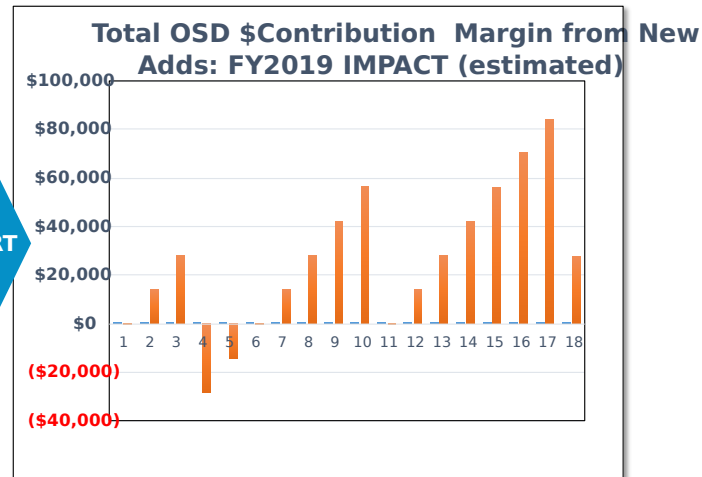


Examine Contribution Margin (CM) per average of OSD Auxiliary Student

- Examine range of 5 to 22 new OSD Auxiliary student adds
- BASELINE model (OSD Scenario 1)**
- NO capital costs for adding OSD dorm rooms
- NO additional OSD management OH required
- NO additional OSD administrative support OH required
- Van cost and van driver cost will be incremental (1 set per new student block of "7")
- 100% of new add students buy Van service at **\$7000.00** per FY
- attendant Care Service Revenue per student calculation based on estimated FY2018 service unit demand
 - Revenue = average attendant Care Service units demand per student x **\$40.00** revenue per unit
- Variable Cost (VC) per new add student (**over examined range**) estimated FY2018 OSD Auxiliary cost structure
 - VC = Average attendant Care Service delivery cost per unit x Average units demand per new add student
- NO fallow capacity in current OSD Auxiliary delivery structure**
 - Cannot add new student services revenue w/o adding corresponding services variable cost
- Impacts are calculated for **FY2019**

Chart Item number	New OSD Aux Adds	FY2019 IMPACT
1	5	(\$54)
2	6	\$14,082
3	7	\$28,219
4	8	(\$28,382)
5	9	(\$14,246)
6	10	(\$109)
7	11	\$14,028
8	12	\$28,165
9	13	\$42,302
10	14	\$56,438
11	15	(\$163)
12	16	\$13,974
13	17	\$28,110
14	18	\$42,247
15	19	\$56,384
16	20	\$70,521
17	21	\$84,658
18	22	\$28,056

CHART



Preliminary Findings: Model outcomes reflects modest positive F impact with larger number of new adds; all other variables and risks constant

Other Potential Gap-closure Actions



- **Grow OSD Auxiliary Program (add attendant Care students)** - Not recommended *at this juncture* to grow any operation without sufficient financial controls in place is *not* best practice. With significant expansion, there are hidden costs of scale-up (e.g. hiring costs, increased employee churn, 'customer service' issues, increased insurance risk, administrative costs, opportunity cost for university management) that dampen the financial model forecast
- **Eliminate OSD Auxiliary Program** - This end-all option can eliminate most issues but may not solve financial loss problem; unless corresponding cost reductions are implemented in OSD Education & General Program.
- **Obtain Grant Revenue** - This approach has merit; but obtaining grants to fund operational losses is complex. This would be a secondary action after EU demonstrates it can operate OSD at some level of break-even. EU can identify OSD programs that will demonstrate a return in investment (ROI) to merit grant funding

Observations

OBSERVATIONS:

- **All schools contacted in this study with OSD Auxiliary-type programs have either reduced their services or eliminated the program entirely.** Reasons cited were operational complexity, liability risk for certain medical procedures, OH cost requirements to serve a small fraction of student population, and development of remote learning options as efficient substitutes for on-campus
- **University of Illinois (Beckwith Program) is most controlled OSD on-campus program** of those contacted. It is essentially a scaled down version of EU OSD Auxiliary; with RN and LPN services eliminated or outsourced, streamlined management, and a strict 'Break-even' budget approach based on revenue vs. cost at optimal student enrollment. They are scaled to **26 OSD auxiliary care students**; with total cost per student in the \$30K range
- **Every OSD Program respondent cited student employees as an issue.** Most had tried expanding student employment as a low-cost option for non-critical OSD services. In every case, they cited problems (reliability, lack of enforceability) that resulted in a roll-back of these efforts. Student employees are still important, but controlled.
- **Edinboro OSD revenue actions to-date are positive.** Raising the OVR per Unit charge, increasing assigned services, and charging for previously 'free' OSD services for FY2018 are all effective methods. *Marketing more 'new' services to current Edinboro OSD population may be the next challenge.* This assumes service quality for FY2018 is good-excellent value, prompting usage growth from OSD students

Observations and Recommendations - EHCA



SCENARIO 3: EHCA was/is the only OSD provider (contacted) to quote OSD Auxiliary Services to EU

- Remaining parties contacted (e.g. USI) either ultimately declined or failed to respond
- Other 3 party options (e.g. larger regional/national Nursing Homes, e.g. Genesis) not in current scope
- EHCA was informed an EU RFP process would be required

OBSERVATION: EHCA could do the job; but a long road ahead. There are enough safeguards in RFP/Contract Process (e.g. due diligence cycle) where either party can kindly part ways. There is risk of EU investing time and effort for no outcome. EHCA would likely need planning help to structure their program and execute the OSD Auxiliary taken in a desirable timeframe.

EHCA-specific Recommendation: EHCA is essentially a cost/benefit decision; with conditions. If: EU retain OSD Auxiliary Services in current form, and EHCA can (A) Reach a quote that saves EU \$X dollars (where X amount is an EU-set threshold) **plus** (B) Provide a clear plan for an implementable solution by Fall 2018 (for FY2019) then recommend EU give serious consideration to move forward, with purpose.

Final Recommendations

RECOMMENDED ACTIONS:

1. **View Edinboro OSD Program as a whole.** EU separation and allocation methods currently used for OSD reporting have limited effective operating budget. Current OSD reporting is detailed, but somewhat fragmented. **The OSD reporting must accurately reflect the OSD Operational Model to establish proper budget controls.**
2. **Create realistic OSD budget and enforce for FY2019.** Fix on given number of Auxiliary students, create a *conservative* revenue and tailor OSD expense to close the FY2018 Budget Gap. Stick to it. Proceed step-wise. Re-evaluate and adjust as needed prior to Spring 2019.
3. **Reduce OSD Management OH costs for FY2019. Assign one OSD General Manager with 'bottom line' responsibility.** Establish a clear leader. Also a direct reporting structure to EU Executives/Provost to eliminate uncertainty and speed decision-making. The OSD Program is top-heavy for its size and scope. Reduce and combine positions (OSD Scenario 2). This will require effort; re-writing descriptions, finding and securing best personnel.
4. **Reduce OSD Student worker budget for FY2019** This recommendation is based on consensus from other Programs, and a HCA EU OSD capacity study using available information. Goal is to reduce FY2018 OSD student spend by one-third.
5. **Freeze current OSD Auxiliary Service Delivery staff levels.** If the Auxiliary program can deliver required services with staff and PCAs, then the argument can be made the Program is overstaffed. **Start here for FY2019 budget baseline.**

OVERALL RECOMMENDATION: Proceed with intent of EU OSD Auxiliary control through **FY2019**. Execute above recommendations. Demonstrate control/gains for potential grant funding. If EHCA option becomes good - make decision for Fall 2019 take-over. If EHCA stalls/withdraws, move forward *in parallel* with a **Part 70 OSD A3** Auxiliary search and qualification via RFP process. Ready an outsource option for decision by Spring 2019; if "GO" then implement for Fall 2019 (FY2020).

Appendices



- i. OSD Auxiliary Program Fall 2017 Revenue*
- ii. OSD Total Baseline Costs for FY2018 (estimated)*
- iii. OSD Auxiliary Capacity Model (estimated)*
- iv. Illinois University OSD Residence Program: Top-down sample B/E Budget*
- v. Illinois University OSD Residence Program: Bottoms up Budget estimation*

Appendix i: OSD Auxiliary Revenue Fall 2017



REVENUE					VR LOU units/hrs conversion rate		service weeks per semester				
TOTAL ATTENDANT CARE FEES \$623,120				UNITS DEMAND		1.00		\$40.00		16	
TOTAL FALL 2017 SEMESTER DEMAND				HOURS		TOTAL LABOR HOURS DEMANDED		Service Fee per Student Semester		Total Service Fee for all Students	
				units bed	TOTAL units of service demanded per Semester						
					1,056		1,056		\$1,760		\$42,240
					500		500		\$4,000		\$20,000
					1,092		1,092		\$3,360		\$43,680
3	Partial Bowel	5.25	13		684		684		\$3,040		\$27,360
4	Assist Bowel/Bladder	4.75	9		120		120		\$2,400		\$4,800
5	Male Catheter	3.75	2		0		0		\$2,400		\$0
6	Female Catheter	3.75	0		0		0		\$960		\$0
7	Catheter Care Indwelling	1.50	0		96		96		\$1,280		\$3,840
8	External Catheter Care	2.00	3		80		80		\$800		\$3,200
9	Empty Urine Bag	1.25	4		2,000		2,000		\$3,200		\$80,000
10	Laundry	5.00	25		552		552		\$960		\$22,080
11	Room Cleaning	1.50	23		1,210		1,210		\$1,760		\$48,400
12	Personal Hygiene	2.75	27.5		48		48		\$640		\$1,920
13	Hair Washing (outside shower)	1.00	3		2,100		2,100		\$4,000		\$84,000
14	Full Shower	6.25	21		576		576		\$2,560		\$23,040
15	Assist Shower	4.00	9		520		520		\$1,600		\$20,800
16	Make-up and Hair	2.50	13		1,344		1,344		\$2,560		\$53,760
17	Dressing	4.00	21		396		396		\$1,760		\$15,840
18	Assist Dressing	2.75	9		240		240		\$800		\$9,600
19	Medication Administration	1.25	12		168		168		\$960		\$6,720
20	Medication Box Set-up	1.50	7		280		280		\$800		\$11,200
21	Snack Assistance	1.25	14		180		180		\$800		\$7,200
22	Turn in Bed	1.25	9		300		300		\$800		\$12,000
23	Menstrual Assist	1.25	15		280		280		\$1,600		\$11,200
24	Transferring/Mobility	2.50	7		336		336		\$1,920		\$13,440
25	Daily Living Support	3.00	7		0		0		\$960		\$0
26	Packing/Bandages	1.50	0		0		0		\$2,400		\$0
27	Non-Verbal	3.75	0		140		140		\$800		\$5,600
28	Braces and Orthotics	1.25	7		640		640		\$800		\$25,600
29	Environment/Nutrition	1.25	32		640		640		\$800		\$25,600
30	Health and Wellness	1.25	32		0		0		\$2,240		\$0
31	Service Animal	3.50	0		0		0		\$2,240		\$0

SUMMARY:

- **REVENUE:** Fall 2017 DEMAND for OSD Attendant Care est. at **\$623K** (actual Attendant Care Billing: **\$633K**)
- Revenue increase over earlier years due to expanded Aux services, increase in per unit rate (\$38 -> \$40) and increase in allotted units per OSD Aux service grid for PA State OVR LOU (c.2017)
- **UNIT DEMAND:** Demand is approximately **15,578 UNITS** for the Fall Semester; at an assumed **1:1 Units-Hours ratio = 15,578 HOURS of demand**

Appendix ii: OSD Total Baseline Costs for FY2018



☐ "Delivery" = provides OSD service(s) which is directly billable to OSD REGISTERED student

# ID	OSD Staff Title	OSD Aux FTE Equivalents	OSD E&G FTE Equivalents	Total FTE (37.5 hrs = 1.0 FTE)"people"	Total OSD staff	Salary cost per group (\$USD)	Benefit cost per group (\$USD)	TOTAL cost group	TOTAL COST OSD Auxiliary	TOTAL COST OSD E&G
4.11	OSD Director	1.0	0.0	1.0	1.0	80,000	46,500	126,500	126,500	0
4.12	Director for GHWC	0.0	0.0	0.0	1.0	0	0	0	0	0
4.13	OSD Coordinator, Assistive Technology	0.0	1.0	1.0	1.0	58,740	41,994	100,734	0	100,734
4.14	OSD Coordinator, Learning Disabilities	0.0	1.0	1.0	1.0	41,416	24,215	65,631	0	65,631
4.15	Occupational Therapist (eliminated)	0.0	0.0	0.0	0.0	0	0	0	0	0
4.16	Clerk Typist 2	0.0	1.0	1.0	1.0	43,709	38,536	82,245	0	82,245
4.17	Clerk Typist 2 (9 mos)	0.25	0.25	0.5	1.0	14,582	14,256	28,838	14,419	14,419
4.18	RN - Registered Nurse Supervisor	1.0	0.0	1.0	1.0	54,693	34,792	89,484	89,484	0
4.19	Transition Specialist (eliminated)	0.0	0.0	0.0	0.0	0	0	0	0	0
4.20	LPN - full time/scheduler (1 position)	1.0	0.0	1.0	1.0	33,022	30,436	63,458	63,458	0
4.21	LPN - part time (4 positions)	2.0	0.0	2.0	4.0	52,608	0	52,608	52,608	0
4.22	Personal Care Attendants - FULL TIME	13.0	0.0	13.0	13.0	335,005	348,299	683,304	683,304	0
4.23	Personal Care Attendants - PART TIME (5)	2.5	0.0	2.5	5.0	44,730	0	44,730	44,730	0
4.24	Van Drivers - Full time (4 positions)	4.0	0.0	4.0	4.0	100,954	104,719	205,674	205,674	0
4.25	Van Drivers - Part time (3 at 1/3 FTE per)	1.0	0.0	1.0	3.0	21,432	0	21,432	21,432	0
4.26	Student Assistants - undergrad (various positions)	0.0	7.0	7.0	20.0	146,000	0	146,000	60,000	86,000
4.27	Student Assistants - post grad (3 @ 1/2 time)	1.5	0.0	1.5	3.0	6,750	9,000	15,750	15,750	0
	SUBTOTAL LABOR	27.3	10.3	37.5	60.0	\$1,033,641	\$692,747	\$1,726,388	\$1,377,359	\$349,029
4.28	Operating Expense Estimated - Auxiliary	0.0	0.0	0.0	0.0			48,200	48,200	
4.29	Operating Expense Estimated - E&G	0.0	0.0	0.0	0.0			13,495		13,495
4.30	Assigned overhead from EDINBORO U ADMIN	0.0	0.0	0.0	0.0			250,000	250,000	
4.31	Other -4	0.0	0.0	0.0	0.0					
4.32	Other -5	0.0	0.0	0.0	0.0					
4.33	TOTAL OSD EXPENSE LOAD w/o EU OH							\$1,788,083	\$1,425,559	\$362,524
4.34	TOTAL OSD EXPENSE LOAD including EU OH							\$2,038,083	\$1,675,559	\$362,524

Source: Edinboro OSD

THE BONADIO GROUP
CPAs, Consultants & More

Appendix iii: OSD Capacity Model



OSD CAPACITY MODEL PER SEMESTER (Fall 2017) OSD Attended Care Services only										
demand		supply								
Attendant Care Service Number	Fall demand (CONVERTED HOURS)	full-time			part-time demand overflow	part-time			STUDENT (grad + undergrad)	residual overage
		RN 4.18	LPN 4.20	PA 4.22		LPN 4.21	PA 4.23	STUDENT (grad + undergrad) 4.26, 4.27		
		2	3			1	2	3		
Semester hours capacity @ X% efficiency										
Service #1 Basic Charge	1,056	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00		
4.26, 4.27		0	0	0		0	0	1		
		0	0	0	1056	0	0	1056	0	
		480	480	6240		960	1200	8944		
Service #2 Full Bowel	500	\$0.00	\$0.00	\$0.00	7.00	\$0.00	\$0.00	\$0.00		
4.21, 4.22, 4.23		0	0	1		1	2	0		
		0	0	500	0	0	0	0	0	
		480	480	5740		960	1200	8944		
Service #3 Partial Bowel	1,092	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00		
4.21, 4.22, 4.23		0	0	1		1	2	0		
		0	0	1092	0	0	0	0	0	
		480	480	4648		960	1200	8944		
Service #4 Bowel/Bladder Assist	684	\$0.00	\$0.00	\$0.00	7.00	\$0.00	\$0.00	\$0.00		
4.21, 4.22, 4.23		0	0	1		1	2	0		
		0	0	684	0	0	0	0	0	

source: Bonadio OSD Capacity Model (estimated)

SUMMARY:

Student demand for OSD Attendant Care Services is matched to capacity of specified service providers (RN, LPN, PA, Student) on a service by service basis

This is done for all 30 Attendant Care Services offered for Fall 2017

When the estimated provider capacity is utilized 100%, any excess demand is pushed to residual overage and the overage party identified

OSD Auxiliary Unit capacity Fall 2017 (est.)



f/t	f/t	f/t	p/t	p/t	p/t
LPN	RN	PA	LPN	PA	STU
480	480	6240	960	1200	10,000
480	480	6240	216	1200	1056
0	0	0	744	0	8944
100%	100%	100%	23%	100%	11%
	1108		0	4798	

OVR LOU (c.2012-2017) est. HOURS/UNITS ratio

f/t	f/t	f/t	p/t	p/t	p/t
LPN	RN	PA	LPN	PA	STU
480	480	6240	960	1200	10,000
174	397	3060	0	0	264
306	83	3181	960	1200	9736
36%	83%	49%	0%	0%	3%
	0		0	0	

OVR LOU (proposed 2018-2020) est. HOURS/UNITS ratio

source: Bonadio OSD Capacity Model estimates

Attendant Care: Usage Summary	
Effective capacity ('hours' at X% efficiency)	
USAGE at: 1 hrs/units ratio	
Remaining Capacity	
% USAGE at 80.0% scheduling efficiency	
OVERAGE TOTAL	5,906
Usage - OSD Employees	8,616
Usage - EU Students	1,056
total calc hours DEMAND	15,578
total booked hours	15,578
variance	0

Large
Overage

Attendant Care: Usage Summary	
Effective capacity ('hours' at X% efficiency)	
USAGE at: 0.25 hrs/units ratio	
Remaining Capacity	
% USAGE at 80.0% scheduling efficiency	
OVERAGE TOTAL	0
Usage - OSD Employees	2,631
Usage - EU Students	264
total calc hours DEMAND	3,895
total booked hours	3,895
variance	0

Excess
Capacity

OBSERVATIONS:

- Assuming the "OLD" ratio of 1 labor hour per OSD service unit results in **demand overage of over 5000 hours (??) at FY18 budgeted staffing levels**
- Assuming the "NEW" ratio of 0.25 hours (15 min) per OSD service unit results in **significant excess capacity at the same FY18 budgeted staffing level (!)**

Appendix iv: Illinois University OSD Budget: FY1



BECKWITH RESIDENTIAL SUPPORT SERVICES										
INCOME										
Student Census (TOTAL BRSS count)	18	19	20	21	22	23	24	25	26	
BRSS Students requiring meal help	4	4	4	4	4	4	5	5	6	
# of live-in PAs	4	4	4	4	4	4	5	5	6	
REV PER STD STUDENT (Base BRSS + meal)	\$22,067	\$22,067	\$22,067	\$22,067	\$22,067	\$22,067	\$22,067	\$22,067	\$22,067	\$22,067
REV PER STU + meal (Base BRSS + meal)	\$25,547	\$25,547	\$25,547	\$25,547	\$25,547	\$25,547	\$25,547	\$25,547	\$25,547	\$25,547
TOTAL REVENUE OR INCOME	\$411,133	\$433,201	\$455,268	\$477,335	\$499,403	\$521,470	\$547,017	\$569,085	\$594,630	
AVG TOTAL SUPPORT REVENUE PER STUDENT	\$22,841	\$22,800	\$22,763	\$22,780	\$22,700	\$22,673	\$22,792	\$22,763	\$22,870	
EXPENDITURES										
Director Salary	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000
Coordinator of Staffing & Ed Salary	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Associate Director Salary	\$57,000	\$57,000	\$57,000	\$57,000	\$57,000	\$57,000	\$57,000	\$57,000	\$57,000	\$57,000
Occup. Therapist (part y?)	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
PA Floater Wages	\$49,904	\$49,904	\$49,904	\$49,904	\$49,904	\$49,904	\$49,904	\$49,904	\$49,904	\$49,904
PA Student Wages	\$130,566	\$137,788	\$145,040	\$152,292	\$159,544	\$166,796	\$174,048	\$181,300	\$188,552	\$195,804
Benefits	\$11,698	\$11,988	\$12,278	\$12,568	\$12,858	\$13,148	\$13,438	\$13,728	\$14,018	\$14,308
Live-In PA wages	\$55,979	\$55,979	\$55,979	\$55,979	\$55,979	\$55,979	\$55,979	\$55,979	\$55,979	\$55,979
Grad Asst-Soc Work	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500	\$15,500
DA Stipend	\$8,152	\$8,152	\$8,152	\$8,152	\$8,152	\$8,152	\$8,152	\$8,152	\$8,152	\$8,152
Meal Assist Fee(4)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Salaries, Wages and Benefits	\$455,766	\$463,316	\$470,852	\$478,394	\$485,936	\$493,478	\$501,019	\$508,561	\$516,103	\$523,645
Copier	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60
Office Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Office Equipment	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000
Telephones - Staff	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150
Parking (1 FTE @ \$675)	\$675	\$675	\$675	\$675	\$675	\$675	\$675	\$675	\$675	\$675
Prox Cards	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800
Meals	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800
FBI Background	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875	\$7,875
Program Fees	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Debt Reduction or interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total OPEX or Non-Personnel Costs	\$33,360	\$33,360	\$33,360	\$33,360	\$33,360	\$33,360	\$33,360	\$33,360	\$33,360	\$33,360
TOTAL Expenditures	\$489,126	\$496,676	\$504,212	\$511,754	\$519,296	\$526,838	\$534,379	\$541,921	\$549,463	\$557,005
AVG TOTAL SUPPORT COST PER STUDENT	\$27,174	\$26,141	\$25,211	\$24,359	\$23,604	\$22,906	\$22,849	\$22,837	\$22,810	\$22,810
BUDGET BALANCE										
Estimated B/E per BRSS Student (rev less exp)	(\$4,037)	(\$3,341)	(\$2,447)	(\$1,639)	(\$904)	(\$233)	(\$57)	\$527	\$661	
Break-even: Total Program Balance	(\$77,995)	\$63,470	\$48,940	\$34,419	\$19,894	(\$5,368)	(\$1,358)	\$13,168	\$17,116	

Beckwith Program

- **“Break-Even” approach**
based on minimum number
of Student Residents
required to cover FC + VC

source: University of Illinois

← **Claimed “B/E”**

Appendix v: Illinois 'bottoms-up' OSD budget build



APPROXIMATION FOR "Bottoms up' build on ILLINOIS BRSS COST BUDGET

26	# Beckwith students
5.5	# hours demanded per day
7	# days/week
991.9	avg weekly hourly demand
32	school weeks (both semesters)
31,741	total FY hourly demand
\$9.25	average wage per hour for PA
\$293,600	total PA only expense incl live in
6	# floater shifts per day
4	# floaters pe shift
7	# days/week demanded
32	school weeks (both semesters)
5376	total FY hourly demand - floater
\$9.25	average floater wage per hour
\$49,728	total FLOATER only expense
\$62,000	director salary (Beckwith only)
\$57,000	Assoc director salary (Beckwith only)
\$50,000	scheduling coordinator salary
\$15,000	disability specialist (occ therapist)
\$184,000	total SALARY admin staff
15	Grad aides hrs per day
1	grad aides per hour
5	# days/week
32	school weeks (both semesters)
\$9.25	avg wage per hour
\$22,200	total graduate aides cost/yr
4	# buses/fleet (1 driver per shift)
8	# hours per shift
2	# shifts
7	# days per week
32	school weeks
14,336	total FY hourly demand - drivers
\$15.00	average DRIVER wage per hour
\$215,040	total BUS DRIVERS cost/yr
\$549,530	estimated annual personnel costs w/o bus drivers
\$21,136	est Support Cost 1 per Beckwith student
\$582,890	estimated annual personnel + OPEX costs w/o bus drivers
\$22,419	est Support Cost 2 per Beckwith student
\$797,930	estimated PERSONNEL + OPEX + BUS DRIVERS
\$30,690	est TOTAL support cost per Beckwith student incl bus drivers

NOTES

PA s to class?	NO	the PCAs do NOT accompany the students to class (those are specially contracted Personal Assistants outside of the School's State Funded Reimbursement)
Medical procedures	NO	Beckwith Program does NOT perform any medical procedures or processes per se requiring an RN or LPN (intubation, catheters, feeding tubes, et al)
Wheelchair repair	NO	None
Insurance costs	NO	No special insurance for the Beckwith Program, nothing "medical"
bill OOS student shortfall?	YES	the OOS student is billed directly for this Beckwith Shortfall and must cover with scholarship, social security benefits, private funds, et al
LOU/MOU with state IL VOC	YES	the university has an LOU/MOU with State of IL only for coverage

source: Phone interviews with Beckwith Director, University of Illinois

B/E Compare to Beckwith Budget Line "Total Expenditures" in Appendix

-\$215K Compare to EDINBORO OSD TOTAL estimates for FY2018 (page